

ABSTRACT

A new endoluminal prosthesis provides for a compressible and expansible single-piece thick walled cylindrical structure. The cylindrical structure is comprised of curved elongated beams which intermittently merge with adjacent curved elongated beams. Each beam has a radial thickness greater than the circumferential width. The configuration of the curved beams reduces stress concentrations in the expanded and compressed condition of the prosthesis. Features are provided for high expansion ratios allowing the prosthesis to collapse into a very small diameter and expand into a very large diameter.